

# New report underpins CO2 reduction benefit of aluminium recycling

**Brussels, 16 November 2021 – A new report by the industry association European Aluminium shows that the European aluminium refining industry is an excellent example of a modern circular economy business model thanks to its ability to recycle aluminium from multiple scrap streams efficiently. The report further highlights substantial improvements in the sector’s carbon emission performance.**

Complementing its [2018 Environmental Profile Report](#), European Aluminium launched today a dedicated study on the environmental performance of aluminium refining processes used to produce cast alloy aluminium ingots from aluminium scrap. Based on European Aluminium members’ data, the report provides accurate and reliable performance and Life Cycle Inventory (LCI) data, the latter essential for calculating the environmental impact of products using aluminium.

Key findings of the report include:

- The GHG emissions of the refining process decreased by 14% between 2010 and 2018.
- When including the benefits related to the recovery of the aluminium oxide from the salt slag recycling process, the environmental impacts of the refining process can be further decreased by 11%.
- The aluminium refining process allows for the recovery and generation of three value-added products, including recycled aluminum, fluxing salt and aluminium oxide from what is generally considered waste. These raw materials recovered from the refining process are used by various industries, including the aluminium, ceramic and cement industries as well as refractories.

Commenting on the findings, Gerd Götz, Director General of European Aluminium, said: *“The findings of our new report highlight the importance of boosting aluminum recycling in Europe. Every year, around 1 million tonnes of aluminium scrap are exported outside the EU, which is a huge loss to a European circular economy. We call on the EU to incentivise investments across the full recycling value chain and strengthen the legislative framework pertaining to waste shipment.”*

As part of its commitment to the circular economy, European Aluminium promotes lifecycle thinking and has been monitoring the industry’s environmental performance for more than 25 years. Progress is monitored through regular data collection and public reporting.

The executive summary of the Environmental Profile Report for the Aluminium Refining Industry is available on [European Aluminium’s website](#). The full report is available upon request.

## Note to editors:

Aluminium is by nature circular, with permanent properties that do not change during use and following repeated recycling into new products. The aluminium recycling process requires only 5 percent of the energy needed to produce the primary metal, resulting in greenhouse gas emissions of only 0.44 tonne CO<sub>2</sub> eq/tonne refined aluminium.

The aluminium refining industry produces casting alloys and deoxidated aluminium from scrap (pre- and post-consumer scraps), contributing to avoid landfilling and helping to protect the environment. Casting alloys are used in foundries to create aluminium castings, including cylinder heads, engine blocks and gearboxes for cars, components used in the mechanical and electrical engineering industries, components for household equipment and many other applications.

In Europe, there are approximately 100 refining plants, most of which are SMEs and/or family-owned businesses.

## About European Aluminium:

European Aluminium, founded in 1981 and based in Brussels, is the voice of the aluminium industry in Europe. We actively engage with decision makers and the wider stakeholder community to promote the outstanding properties of aluminium, secure growth and optimise the contribution our metal can make to meeting Europe's sustainability challenges. Through environmental and technical expertise, economic and statistical analysis, scientific research, education and sharing of best practices, public affairs and communication activities, European Aluminium promotes the use of aluminium as a material with permanent properties that is part of the solution to achieving sustainable goals, while maintaining and improving the image of the industry, of the material and of its applications among their stakeholders. Our 95+ members include primary aluminium producers; downstream manufacturers of extruded, rolled and cast aluminium; producers of recycled aluminium and national aluminium associations are representing more than 600 plants in 30 European countries. Aluminium products are used in a wide range of markets, including automotive, transport, high-tech engineering, building, construction and packaging.

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